Weekly Influenza Surveillance Report

Maryland Department of Health and Mental Hygiene | Infectious Disease and Environmental Health Administration
Office of Infectious Disease Epidemiology and Outbreak Response

SYNOPSIS

Influenza activity in Maryland during the week of January 16 to 22, 2011, remained "widespread." Cases of influenza were reported throughout Maryland. The number and proportion of visits to sentinel providers and emergency departments for influenza-like illness continued to increase. One outbreak of influenza was reported last week. The proportion of Maryland residents reporting ILI through MRITS increased slightly. The State Laboratories Administration reported positive PCR results in samples submitted last week for influenza types A (H1N1), A (H3), and type B.

PLEASE NOTE: Influenza is not a reportable condition in Maryland. As a result, we rely on sources of information such as clinical labs, physician offices, and the public. Because not all cases are reported, these data do not represent the true number of cases of influenza in Maryland. All data are preliminary and subject to change. The information in this report is not intended to be used for individual diagnoses.

2750

INFLUENZA-LIKE ILLNESS SURVEILLANCE (ILINet)

During week 3, 12 sentinel providers reported 326 (5%) of 6,525 visits to their practices were for ILI. This is below the state baseline of 5.6%.

This same week last season, when influenza activity peaked late in October of 2009 and was on the decline by December, the proportion of visits for ILI was 1.9%.

For more information on the US Outpatient Influenza-like Illness Reporting Network (ILINet), please visit our website: http://dhmh.maryland.gov/fluwatch and click on "ILINet Sentinel Providers".

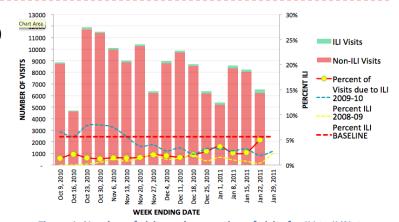


Figure 1. Number of visits and proportion of visits for ILI to ILINet sentinel providers, 2010-11 influenza season

CLINICAL LAB REPORTS OF RAPID FLU TESTING

During week 3, 19 sentinel clinical laboratories reported 558 (23.3%) of 2,390 rapid influenza tests as positive: 505 were positive for type A, and 53 were positive for type B influenza. This proportion of positive tests was higher than the proportion reported at this time last season, which was 2.5%.

While not as accurate as PCR tests, rapid influenza tests become more accurate as the flu season progresses and influenza is more prevalent in the community. As a result, rapid influenza tests and their results are good indicators of who was sick enough to be tested and who truly has the flu.

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Figure 2. Number and result of rapid tests reported by sentinel clinical laboratories, 2010-11 influenza season

Type of Positives	Number (%)
Type A	1,220 (89%)
Type B	149 (11%)
Positive, but not typed	0
Total Positive	1,369 (100%)

Table 1. Number of positive rapid influenza tests, by type, reported by collaborating clinical laboratories 2010-11 season to date

GET VACCINATED!

Go to

http://dhmh.maryland.gov/swineflu/getVaccinated.html and find your local health department for more information.

MARYLAND RESIDENT INFLUENZA TRACKING SURVEY (MRITS)

During week 3, 618 (40.7% of total) participants in the MRITS responded to the weekly survey. Of those who responded, 23 (3.7%) reported flu-like illness, a proportion that has risen steadily for the past three weeks. This proportion is higher than this same week last season, when about 1.8% of respondents reported flu-like illness.

We are always looking for more participants for the MRITS. If you know someone who would like to participate, please direct them to our website: http://dhmh.maryland.gov/flusurvey.

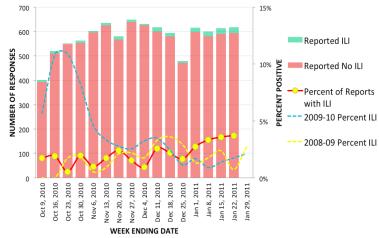


Figure 3. Number of responses and proportion reporting ILI to the MRITS by week, 2010-11 influenza season

DHMH LABORATORIES ADMINISTRATION REPORTS

During week 3, the DHMH Laboratories Administration performed a total of 88 PCR tests for influenza. Fortyseven (47) were positive for influenza: 24 were type A (H1N1), 22 were type A (H3), and 1 was type B.

The table to the right shows the breakdown of positive tests by influenza strain for the 2010-11 influenza season to date.

More information on the valuable work done by the DHMH Laboratories Administration is available at http://dhmh.maryland.gov/labs.

Infl	uenza Type	No. (%)					
Type A							
	H1	111 (48.7%)					
	Н3	106 (46.5%)					
	Unsubtyped	0 (0%)					
Type B		11 (4.8%)					
TOTAL		228 (100%)					

Table 1. Number of respiratory samples positive for influenza by PCR reported by the DHMH Labs Administration, 2010-11 influenza season

EIP INFLUENZA HOSPITALIZATION SURVEILLANCE

During week 3, 58 hospitalizations associated with influenza were reported to the Emerging Infections Program (EIP). To date, there have been 305.

To be a confirmed hospitalization associated with influenza, the person must be hospitalized and have a positive influenza test of any kind (rapid test, PCR, culture).

Last season, 20 hospitalizations were reported during week 3, with a total of 1,373 at that point in the season. For the entire season (2009-10), 1,400 hospitalizations were reported.

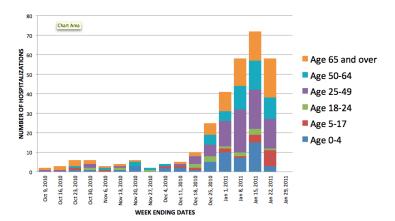


Figure 4. Number of hospitalizations associated with influenza, by age group and week, reported to the Emerging Infections Program, 2010-11 influenza season

DID YOU KNOW?

Should you still get the flu vaccine if you come down with the flu? Yes. The reason for this is that there are different types of influenza (A and B) and strains (H1N1, H3) circulating this influenza season. If you are infected and become sick with one strain, you will not be immune against the other strains that are circulating. Is it possible, then, to have the flu twice in a season? Yes. Your susceptibility depends on many factors, but you can still get the flu even if you got it once the same season.

REPORTS OF OUTBREAKS IN INSTITUTIONAL SETTINGS

During week 3, one outbreak of influenza was reported. This brings the season's total to 17 reported outbreaks. Last season, a total of 208 outbreaks of respiratory illness were reported. Of those, 33 were confirmed as influenza outbreaks.

An outbreak of ILI is re-classified as an outbreak of influenza if there is laboratory evidence of influenza virus present in the samples collected from casepatients during the outbreak.

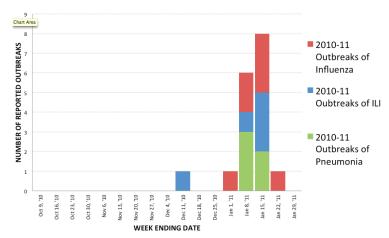


Figure 5. Number of outbreaks reported by week and by type during the 2010-11 influenza season.

EMERGENCY DEPARTMENT ILI REPORTS (ESSENCE)

During week 3, a total of 44,329 visits to emergency departments for all reasons were reported to the Office of Preparedness and Response through the ESSENCE system. Of those visits, 1,526 (3.4%) were for influenza-like illness. This proportion is slightly higher than those observed over the prior two influenza seasons.

For more information on ESSENCE, please visit the Office of Preparedness and Response's web site at: http://bioterrorism.dhmh.state.md.us.

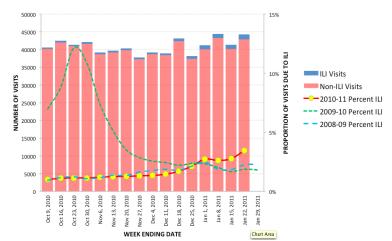


Figure 6. Number and proportion of visits to emergency departments for ILI by week reported through ESSENCE, 2010-11 influenza season.

GOOGLE FLU TRENDS

According to Google, influenza activity in Maryland is currently "MODERATE". What does this mean? From the Google Flu Trends Website: "We have found a close relationship between how many people search for flu-related topics and how many people actually have flu symptoms. Of course, not every person who searches for 'flu' is actually sick, but a pattern emerges when all the flu-related search queries are added together. We compared our query counts with traditional flu surveillance systems and found that many search queries tend to be popular exactly when flu season is happening. By counting how often we see these search queries, we can estimate how much flu is circulating in different countries and regions around the world."

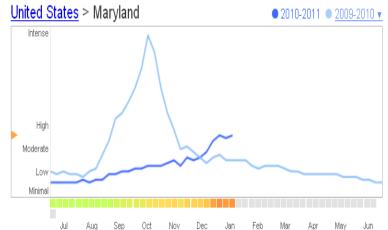


Figure 7 – According to Google Flu Trends, influenza activity in Maryland is currently "moderate". At this time last year, during the 2009 H1N1 influenza pandemic, influenza activity in Maryland was "low" to "moderate".

OFFICE OF INFECTIOUS DISEASE EPIDEMIOLOGY AND OUTBREAK RESPONSE

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ALL THE INFORMATION INCLUDED IN THIS REPORT IS PROVISIONAL AND SUBJECT TO CHANGE AS MORE DATA ARE RECEIVED FROM SURVEILLANCE SOURCES.

THE INFORMATION INCLUDED IN THIS REPORT IS NOT INTENDED TO BE USED FOR INDIVIDUAL DIAGNOSES.

ONLINE VERSION OF THIS REPORT AND PAST SEASONS' REPORTS MAY BE DOWNLOADED AT:

http://dhmh.maryland.gov/fluwatch

FLU SURVEILLANCE IN NEIGHBORING STATES:

DELAWARE-

HTTP://BIT.LY/9Zkp3

DC-

http://tinyurl.com/yj7br9e

PENNSYLVANIA-

http://tinyurl.com/37323xn

VIRGINIA-

http://tinyurl.com/kmnaeu

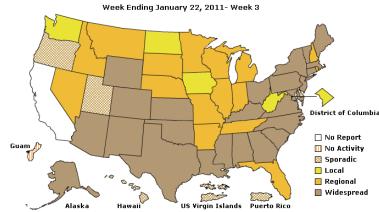
WEST VIRGINIA-

http://tinyurl.com/39m2kon

CDC NATIONAL INFLUENZA SURVEILLANCE REPORT (http://cdc.gov/flu/weekly)

During week 3 (January 16-22, 2011), influenza activity in the United States increased.

- Of the 5,823 specimens tested by U.S. World Health
 Organization (WHO) and National Respiratory and Enteric Virus
 Surveillance System (NREVSS) collaborating laboratories and
 reported to CDC/Influenza Division, 1,754 (30.1%) were positive
 for influenza.
- The proportion of deaths attributed to pneumonia and influenza (P&I) was below the epidemic threshold.
- Three influenza-associated pediatric deaths were reported. Two of these deaths were associated with influenza A (H3) virus infection and one was associated with an influenza B virus.
- The proportion of outpatient visits for influenza-like illness (ILI) was 3.6%, which is above the national baseline of 2.5%. Six of the 10 regions (Regions 2, 3, 4, 5, 6, and 7) reported ILI above region-specific baseline levels. Nine states experienced high ILI activity, eight states experienced moderate ILI activity, New York City and nine states experienced low ILI activity, 24 states experienced minimal ILI activity, and data were insufficient from the District of Columbia.
- The geographic spread of influenza in 25 states was reported as widespread; 16 states reported regional influenza activity; the District of Columbia and four states reported local influenza activity, Puerto Rico, the U.S. Virgin Islands, and four states reported sporadic influenza activity, Guam reported no influenza activity, and one state did not report.



Influenza-Like Illness (ILI) Activity Level Indicator Determined by Data Reported to ILInet
2010-11 Influenza Season Week 3 ending Jan 22, 2011

